MISCELLANEA ZOOLOGICA HUNGARICA

Tomus 3. 1985 p. 41-44

A new species of Zonitarion (Mollusca, Urocyclidae) from the People's Republic of Congo

By

A. VARGA

(Received 13 May, 1985)

ABSTRACT. Zonitarion baloghi sp. n. (Mollusca, Urocyclidae) is described from Brazzaville (People's Republic of Congo). It differs from the related species in the anatomic structure of the male genital organs.

I have got the Urocyclidae material of the African soil-zoological expedition of Dr. J. BALOGH and Dr. A. ZICSI for scientific investigation from the Mollusc Collection of the Hungarian Natural History Museum (Budapest). A species proved to be new for the science in the course of the investigation.

Zonitarion (Belonarion) baloghi sp. n.

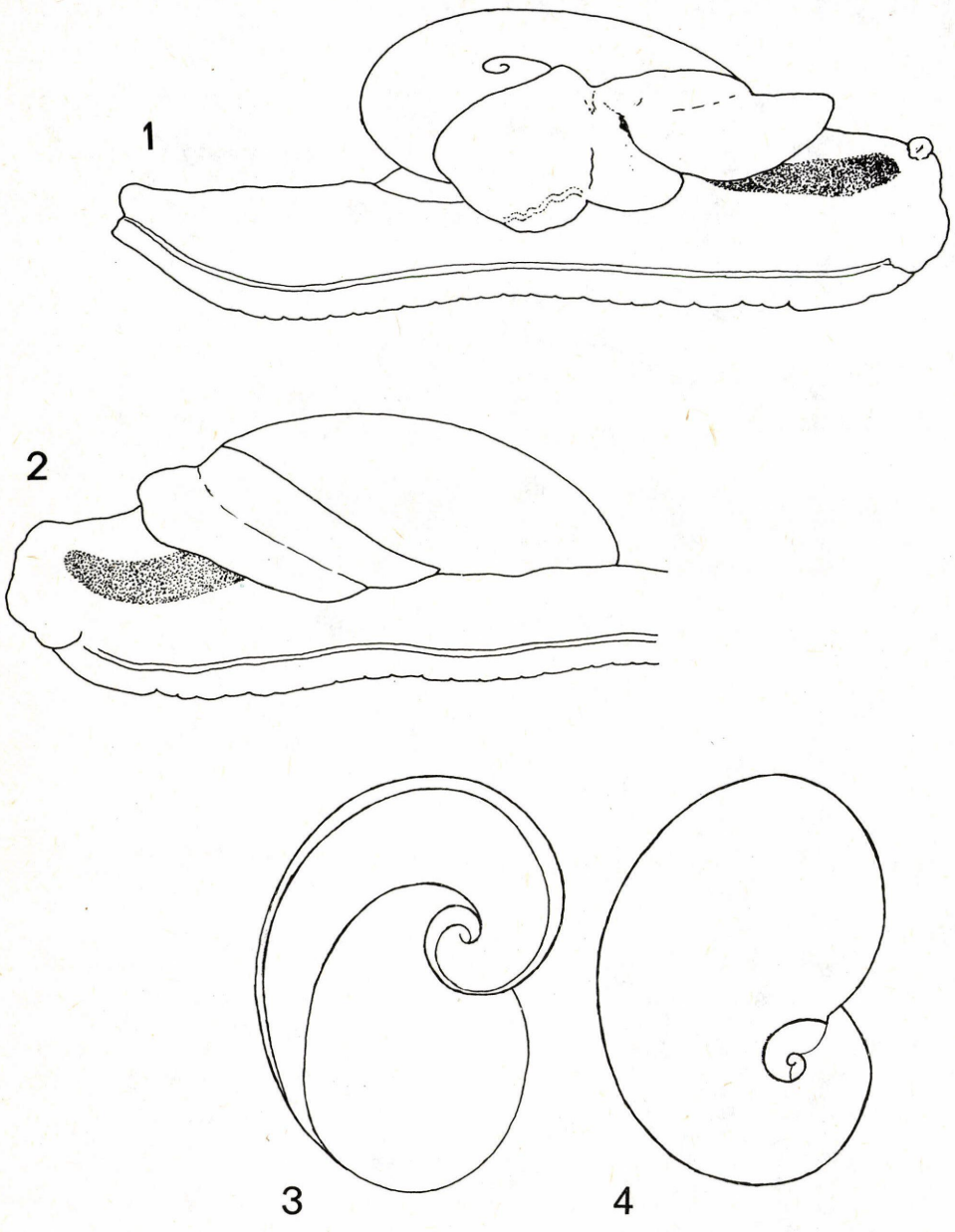
Description. The animal preserved in alcohol is 29 mm long (Figs 1-2). Body side, sole, foot-fringe are yellowish-brown. The back of the tubercles at the tail region are light brown, the ditches among them are greysh-brown coloured. This colour-combination makes the colouring of the tail region darker. The backside under the shell is blackish-grey. A lackish-brown strip goes on to the direction of the pneumostoma behind the head both on the left and right sides. The lobes of the mantle are a shade darker that the colouring of the bodyside.

Shell (Figs 3-4) 2.5 whorls. The preembrional shell has 1 whorl, whitish. Embryonal shell with nucleus has 1.5 whorls, yellowish-white. The last whorl is horn-brown, the shell-doubling along the suture present itself as a dark brown strip. Shell is smooth, glossy, without sculpture, its surface is decorated only by the diaphanous growth-lines. The shell is calcified a little on top, limeless in a broad strip at the bottom, membraneous. Length 14.3 mm, width 10 mm, height about 6 mm.

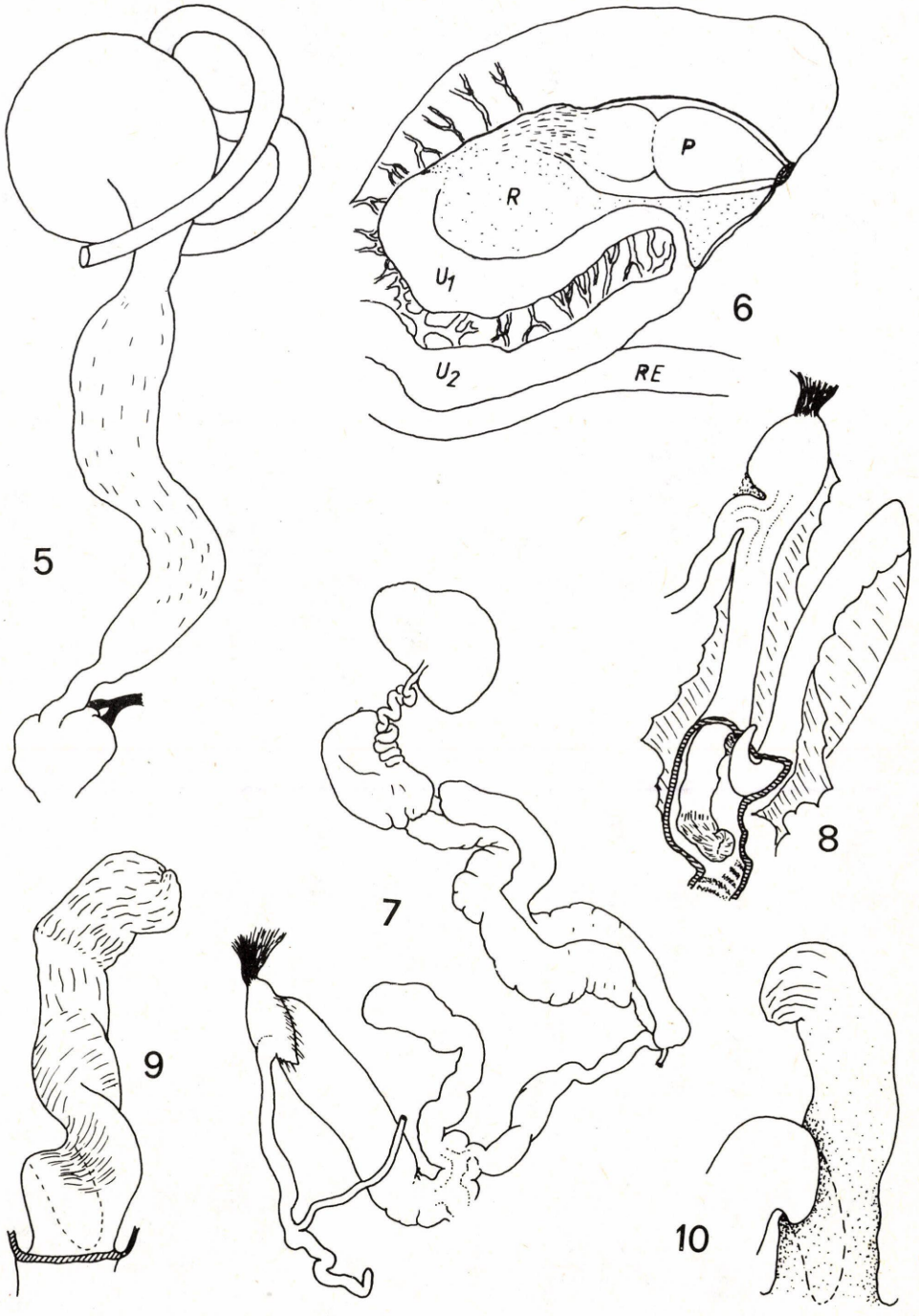
The digestive tract (Fig. 5) is dominated by the oesophagus and the stomach, the intestinal tract is reduced. The retracting muscle of the buccal mass is forked which joints close to the bucca. The radula-sac is small, has no retracting muscle. Oesophagus dilates to a great pouch close to the buccal mass, that narrows down before the stomach and is well differentiated from it. The wall of the pouch is muscled, corrugated inside. The stomach is about one winding, globular, its wall is thin, without corrugation. The intestinal tract forms a symmetrical figure of eight.

Mantle-organs (Fig. 6). The kidney is in contact to the dome of mantle. P= pericardium, R= kidney, U_1 U_2= ureter, RE= rectum.

The reproductive system (Figs 7-10). Caecum is strongly developed, rises over the sarcobelum, the retracting muscle of the penis adheres to its apex. The penis-seath covers the sarcobelum but leaves free the caecum with a slanting opening (Fig. 7). The epiphallus is long, the length of the flagellum exceeds the half of the length of the epiphallus. The penis is tube-like, thinner than the caecum. The caecum is definitely differentiated, clubshaped (Fig. 8). The length of the penis papilla exceeds the half of the length of the penis, it is cystiform (Figs 8-9), its apex reaches to the atrium. The vagina is very short. The pedunculus of the bursa copulatrix is long, its wall is thick, the receptacle can be well differentiate,



Figs 1-10. Zonitarion baloghi sp. n.
1-2 = external morphology; 3-4 = shell; 5 = alimentary canal; 6 = mantle; 7 = gonads; 8 = penis-sarcobelum; 9 = penis papilla; 10 = penis papilla in original position


P
R
U1
U2
RE
5
6
7
8
9
10

its wall is thin. The free oviduct is long. The length ratio of penis with caecum, bursa copulatrix, free oviduct is 1 : 1 : 1. The vas deferens is short. Sarcobelum is spindle-shaped, its papilla is bent and its apex becomes pressed in the base of the penis papilla (Fig. 10).

Material: People's Republic of Congo, Brazzaville, Kindamba, Heya, near cave 9. 11. 1963 leg. J. BALOGH and A. ZICSI. Only the holotype is known.

Notes: Its anatomic structure can ba well distinguished from any other Zonitarion species. The penis does not prostrate itself on the sarcobelum, as it is the case at the Z. (B.) camerunensis Van Mol, 1970, but draws off the sarcobelum a little, the caecum becomes free extruding itself out of the penis-seath.

I dedicate the new species to Prof. Dr. János BALOGH, member of the Academy, who first collected it.

REFERENCE

VAN MOL, J. (1970): Révision des Urocyclidae (Mollusca, Gastropoda, Pulmonata) Anatomie - systématique - zoogéographie. - Mus. Royal de L'Afrique Centr., Tervuren, 180: 1-234.

Author's address: András VARGA
Mátra Muzeum
H-3200 Gyöngyös
HUNGARY